

CLAIMS

1. An interface unit for effecting communication between a device and an electronic system, the interface comprising:

a device communication module for communicating with the device over a wireless link in accordance with a first protocol;

a system communication module for communicating with the electronic system using a second protocol; and

a translation unit, operatively connected to the device communication module and to the system communication module, for translating data received from the device in accordance with the first protocol into translated data adapted for the electronic system in accordance with the second protocol.

2. The interface unit of Claim 1 wherein the translation unit is further operative to translate information received from the electronic system in accordance with the second protocol into translated information adapted for the device in accordance with the first protocol.

3. The interface unit of Claim 1 wherein the electronic system comprises a personal computer and the second protocol is a Universal Serial Bus protocol (USB), the interface unit being connected to a USB port of the personal computer.

4. The interface unit of Claim 1 wherein the device communication module includes a peripheral detection and connection module.

5. The interface unit of Claim 4 further including a Bluetooth interface operatively connected to the peripheral detection and connection module, the

communication module further including a Bluetooth protocol stack operatively connected to the Bluetooth interface.

6. The interface unit of Claim 1 wherein the communication module includes a Bluetooth multiplexing/demultiplexing arrangement operatively connected to the translation unit.

7. The interface unit of Claim 1 wherein the system communication module further includes a USB protocol stack, the interface unit further including a USB interface operatively connected to the USB protocol stack.

8. The interface unit of Claim 7 wherein the system communication module includes a USB multiplexing/demultiplexing arrangement operatively connected to the translation unit and to the USB protocol stack.

9. The interface unit of Claim 8 wherein the system communication module includes a configuration database operatively connected to the USB multiplexing/demultiplexing arrangement.

10. The interface unit of Claim 1 wherein the first protocol comprises the Bluetooth protocol and the second protocol comprises the USB protocol, the translation unit being further operative to translate information received from the electronic system in accordance with the USB protocol into translated information adapted for the device in accordance with the Bluetooth protocol.

11. A method for effecting communication between a device and an electronic system, the method comprising:

communicating with the device over a wireless link in accordance with a first protocol;

communicating with the electronic system using a second protocol; and
translating data received from the device in accordance with the first protocol
into translated data adapted for the electronic system in accordance with the second
protocol.

12. The method of Claim 11 further including translating information received
from the electronic system in accordance with the second protocol into translated
information adapted for the device in accordance with the first protocol.

13. The method of Claim 11 wherein the electronic system comprises a
personal computer and the second protocol is a Universal Serial Bus protocol (USB),
the method further including establishing a connection with a USB port of the
personal computer.

14. The method of Claim 11 wherein the communicating with the device
includes detecting a type of the device and connecting to the device in accordance
with the first protocol.

15. The method of Claim 14 wherein the translating includes selecting a
translation routine from a set of predefined translation routines based upon the type of
the device

16. A system for effecting communication with a device over a wireless link
in accordance with a first protocol, the system comprising:

a personal computer having an interface compliant with a second protocol; and
an interface unit in communication with the personal computer through the
interface, the interface unit including:

a device communication module for transmitting information to, and
receiving data from, the device in accordance with the first protocol;

a system communication module for communicating with the personal computer using a second protocol; and

a translation unit, operatively connected to the device communication module and to the system communication module, for translating the data received from the device in accordance with the first protocol into translated data adapted for the electronic system in accordance with the second protocol.

17. The system of Claim 16 wherein the translation unit is further operative to translate information received from the electronic system in accordance with the second protocol into translated information adapted for the device in accordance with the first protocol.

18. The system of Claim 16 wherein the second protocol is a Universal Serial Bus protocol (USB), the interface including a USB port of the personal computer.

19. The system of Claim 16 wherein the device communication module includes a peripheral detection and connection module.

20. The system of Claim 19 further including a Bluetooth interface operatively connected to the peripheral detection and connection module, the communication module further including a Bluetooth protocol stack operatively connected to the Bluetooth interface.

21. The system of Claim 16 wherein the communication module includes a Bluetooth multiplexing/demultiplexing arrangement operatively connected to the translation unit.

22. The system of Claim 16 wherein the system communication module further includes a USB protocol stack, the interface unit further including a USB interface operatively connected to the USB protocol stack.

23. The system of Claim 22 wherein the system communication module includes a USB multiplexing/demultiplexing arrangement operatively connected to the translation unit and to the USB protocol stack.

23. A computer-readable storage medium containing code for controlling an interface unit disposed to effect communication between a device and an electronic system, comprising:

a device communication routine for controlling communication with the device over a wireless link in accordance with a first protocol;

a system communication routine for controlling communication with the electronic system using a second protocol; and

a translation routine for translating data received from the device in accordance with the first protocol into translated data adapted for the electronic system in accordance with the second protocol.

24. The storage medium of Claim 23 wherein the translation routine is further operative to translate information received from the electronic system in accordance with the second protocol into translated information adapted for the device in accordance with the first protocol.

25. The storage medium of Claim 23 wherein the device communication routine includes a peripheral detection and connection routine.

26. The storage medium of Claim 25 wherein the device communication routine utilizes a Bluetooth protocol stack in processing the data received from the device.

27. The storage medium of Claim 24 wherein the system communication routine utilizes a USB protocol stack in processing information received from the electronic system and translated data received from the translation routine.

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